

Work Order ID 65760

January 25, 2011 7:49:33 AM



Item ID: D3319-1

Accept



Setup Start



Revision ID:

Item Name: Wearplate

Stop



Start Date: 1/25/11 Start Qty: 8.00



Cust Item ID:

Required Date: 2/01/11 Req'd Qty: 8.00



Customer:

Reference:

Approvals:

Process Plan:

W

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3319	Rev B

100 0.00



FLOW WATER JET

Waterjet

Memo

FLOW CNC Waterjet

1-Cut as per Dwg D3319

Dwg Rev: B

Prog Rev: B

2-Deburr if necessary

B11-2-2

(8)

110 0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

Quality Control

B11-2-2

120 0.00



QC8- Inspect parts - second check

QC

Memo

Quality Control

8/10/02

76

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	NC BRAKE	0.00				8			
Brake NC	Memo	0.00							
Brake NC	1- Form using DT8326 & DT8261 as per Dwg D3319Rev: <u>B</u> 2- Form flat on press using DT8776 block								
150	QC6- Inspect dimensions to drawing	0.00							
QC	Memo	0.00							
Quality Control									
160	Weld per dwg A/R Hardcoat steel Batch: <u>M116678</u>	0.00							
Large Fab	Large Fab	0.00							
Large Fab	Memo	0.00							
Large Fab	1- Layout weld location as per Dwg D3319 using jig D3319-1T3 2- Weld hard surface using DT8755 per QSI 004 and Dwg D3319 Rev: <u>B</u>								
	Qty Part Number Description Batch								
	A/R N/A 228/7560 Hardcoat Rod								

Swirls



EL 11-2-24



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 65760

January 25, 2011 7:49:34 AM

Page 3

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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

170

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

Quality Control

8 11/02/25

180

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8 11/02/25

(+8)

190

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00



Powdercoat

Memo

Powder Coating

START TIME:
OVEN TEMPERATURE:
FINISH TIME:

8:30
320°F
9:00

(8X) m-l 11/03/01

M115128

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 65760

January 25, 2011 7:49:34 AM



Page 4

Item ID: D3319-1

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Setup Start



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Item Name: Wearplate

Start Date: 1/25/11 Start Qty: 8.00



Cust Item ID:

Required Date: 2/01/11 Req'd Qty: 8.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

200

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

8 BR 11-3-1

210

Packaging

0.00



Packaging

Memo

0.00

Packaging

Identify on inside surface using a permanent fine point marker with the following:
TCCA-PDA, Dart Aerospace Ltd.
P/N: D3319-1, B/N: BXXXXX
For Product Eligibility see PDA05-18
and Stock
Location: 497

11/3/11 (80)

220

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/03/02

CL 11/03/02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 25, 2011 7:49:32 AM

Page 1

Work Order ID: 65760

Parent Item: D3319-1

Parent Item Name: Wearplate



Start Date: 1/25/11

Required Date: 2/01/11

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP: B05.10.14 Added step 9, dwg rev B [KJ/EC]
IPP Rev:C Now on Waterjet 06-10-26 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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M1010S18GA

Purchased

No

100

sf

160.0000

0.628

5.288421



1010/1025 SHEET .048



B11-2-2

Location

Loc Qty

Loc Code

MAT

160

110996

4

116268

156

116268

8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 65760
Description: Wearplate		Part Number: D3319-1
Inspection Dwg: D3319 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

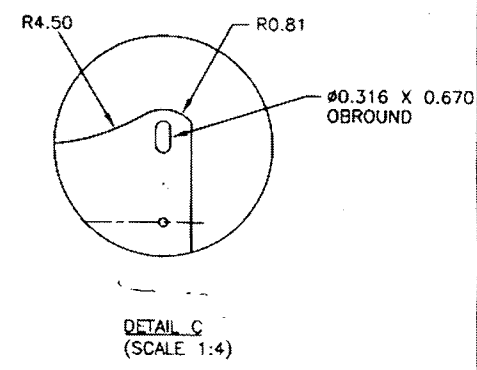
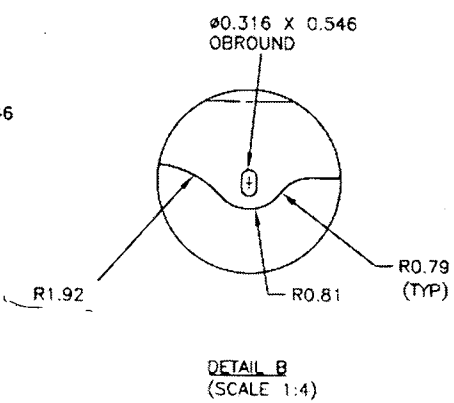
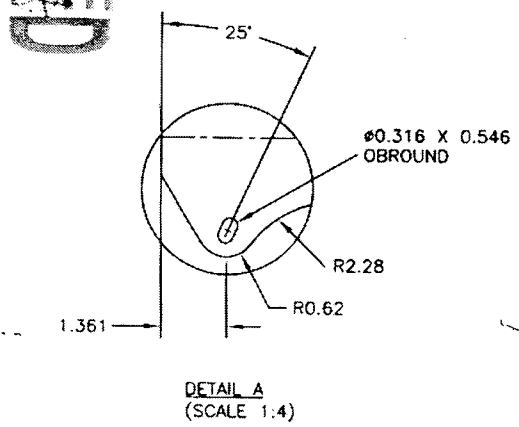
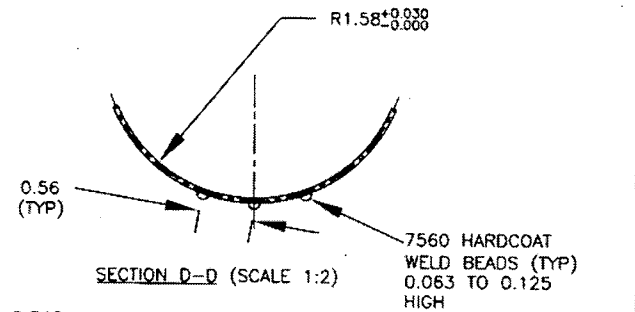
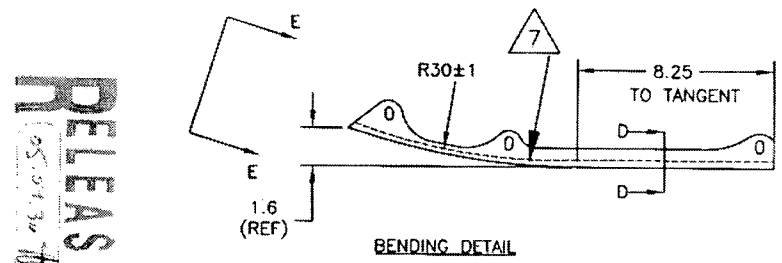
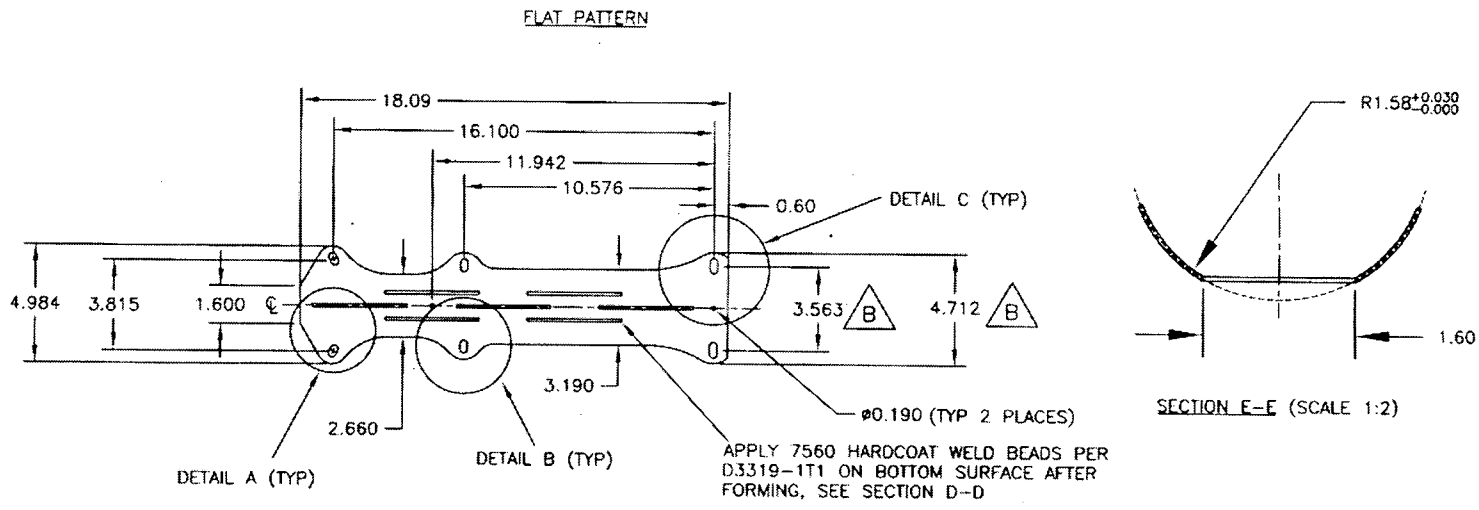
☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
4.984	+/-0.010	4.979	✓		U 1802	
1.600	+/-0.010	1.600	✓		U	
2.660	+/-0.010	2.664	✓		U	
3.190	+/-0.010	3.197	✓		U	
3.563	+/-0.010	3.558	✓		U	
4.712	+/-0.010	4.708	✓		U	
0.60	+/-0.030	.595	✓		U	
10.576	+/-0.010	10.576	✓		T Bot	
11.942	+/-0.010	11.902			T	
18.09	+/-0.030	18.69	✓		T	
Ø0.316 x 0.546	+0.006/-0.001 x +/-0.010	.314 x .552	✓		U	
Ø0.316 x 0.670	+0.006/-0.001 x +/-0.010	.314 x .676	✓		U	
Ø0.190	+0.005/-0.001	.195	✓		U	

Measured by: IB	Audited by: S	Prototype Approval: N/A
Date: 11-2-2	Date: 11/02/02	Date: N/A

Rev	Date	Change	Revised by	Approved
A	07.05.31	New Issue	KJ/JLM	

DART



- D3319-1 WEARPLATE**
- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
 - 2) FINISH: POWDER COAT GREY SANOTEX (REF.4.3.5.6) PER DART QSI 005 4.3
 - 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) PART IS SYMMETRICAL ABOUT CENTERLINE
 - 5) ALL DIMENSIONS IN INCHES
 - 6) WELD PER DART QSI 004
 - 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-1 B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-18"

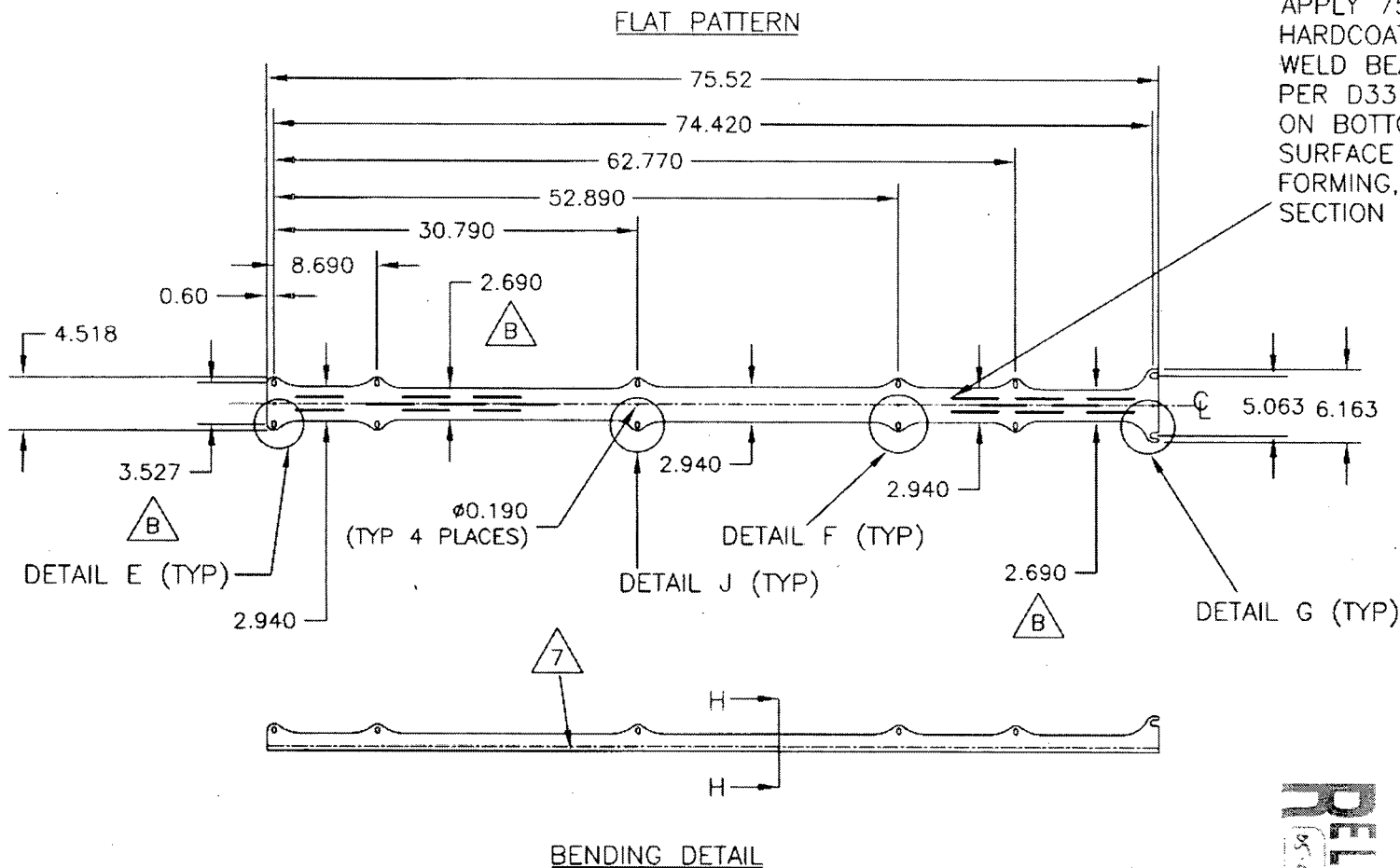
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P41	P41	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
		D3319
DATE	TITLE	REV. B
05.06.06	WEARPLATE	SHEET 1 OF 5
		SCALE 1:8
A	04.09.24	NEW ISSUE
B	05.06.06	WIDEN HOLES, REDUCE WIDTH -3/-5/-7

RELEASED
 05-01-30

65760

DART

APPLY 7560
HARDCOAT
WELD BEADS
PER D3319-3T1
ON BOTTOM
SURFACE AFTER
FORMING, SEE
SECTION H-H



DESIGN	DRAWN BY	DART AEROSPACE LTD
CHECKED	APPROVED	HAMKESBURY, ONTARIO, CANADA
DATE	DRAWING NO.	REV. B
05.06.06	D3319	SHEET 2 OF 5
	TITLE	SCALE
	WEARPLATE	1:15

RELEASED
05-07-30

65760

D3319-3 WEARPLATE

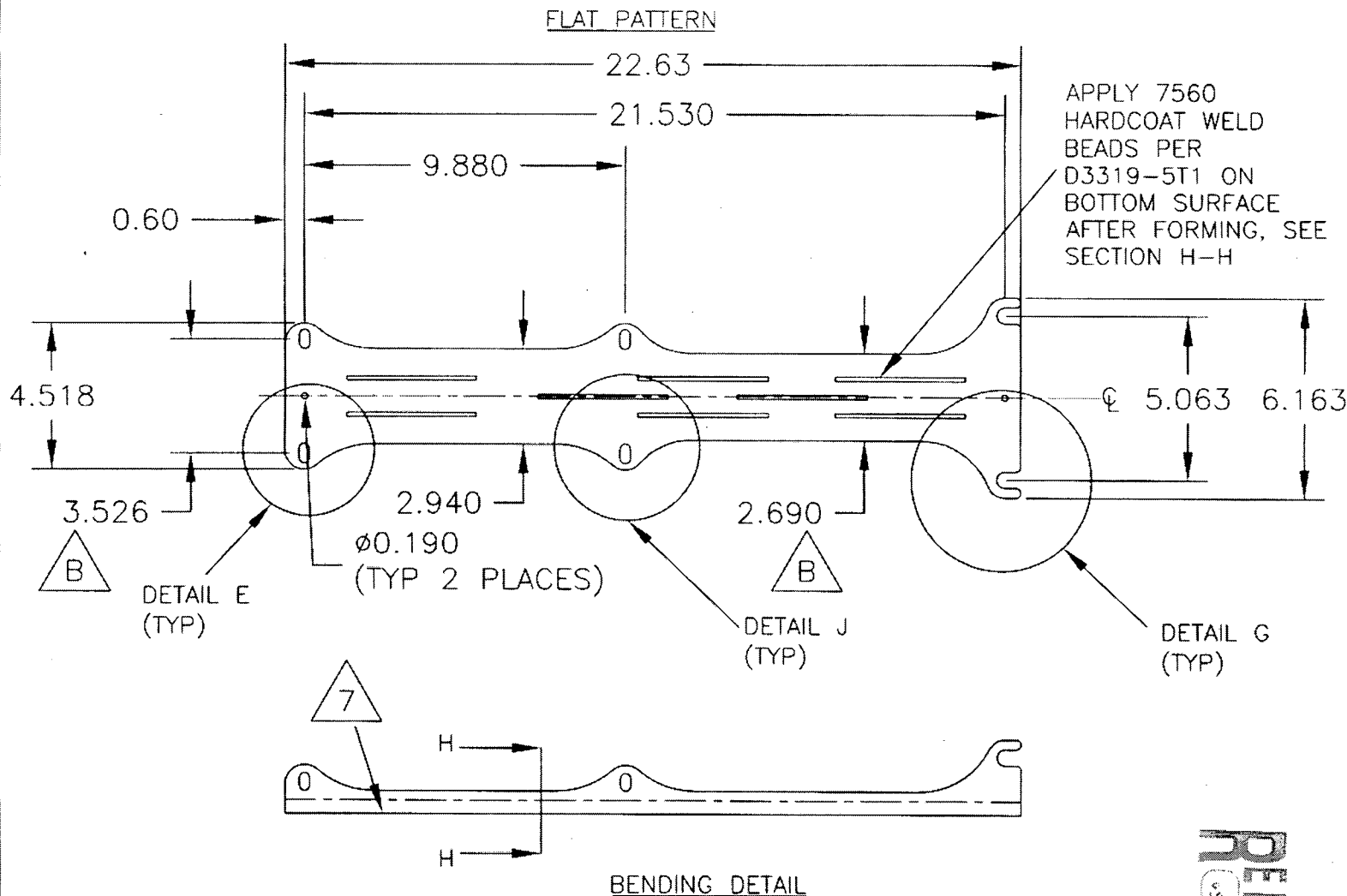
- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-3 B/N BXXXXX,
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

DART

DESIGN	041	DRAWN BY	041	DART AEROSPACE LTD HAMKESBURG, ONTARIO, CANADA
CHECKED	#	APPROVED	#	DRAWING NO. D3319
DATE	05.06.06	TITLE	WEARPLATE	REV. B
				SHEET 3 OF 5
				SCALE 1:5

RELEASED
05.07.2006

APPLY 7560
HARDCOAT WELD
BEADS PER
D3319-5T1 ON
BOTTOM SURFACE
AFTER FORMING, SEE
SECTION H-H



D3319-5 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-5 B/N BXXXXX,
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

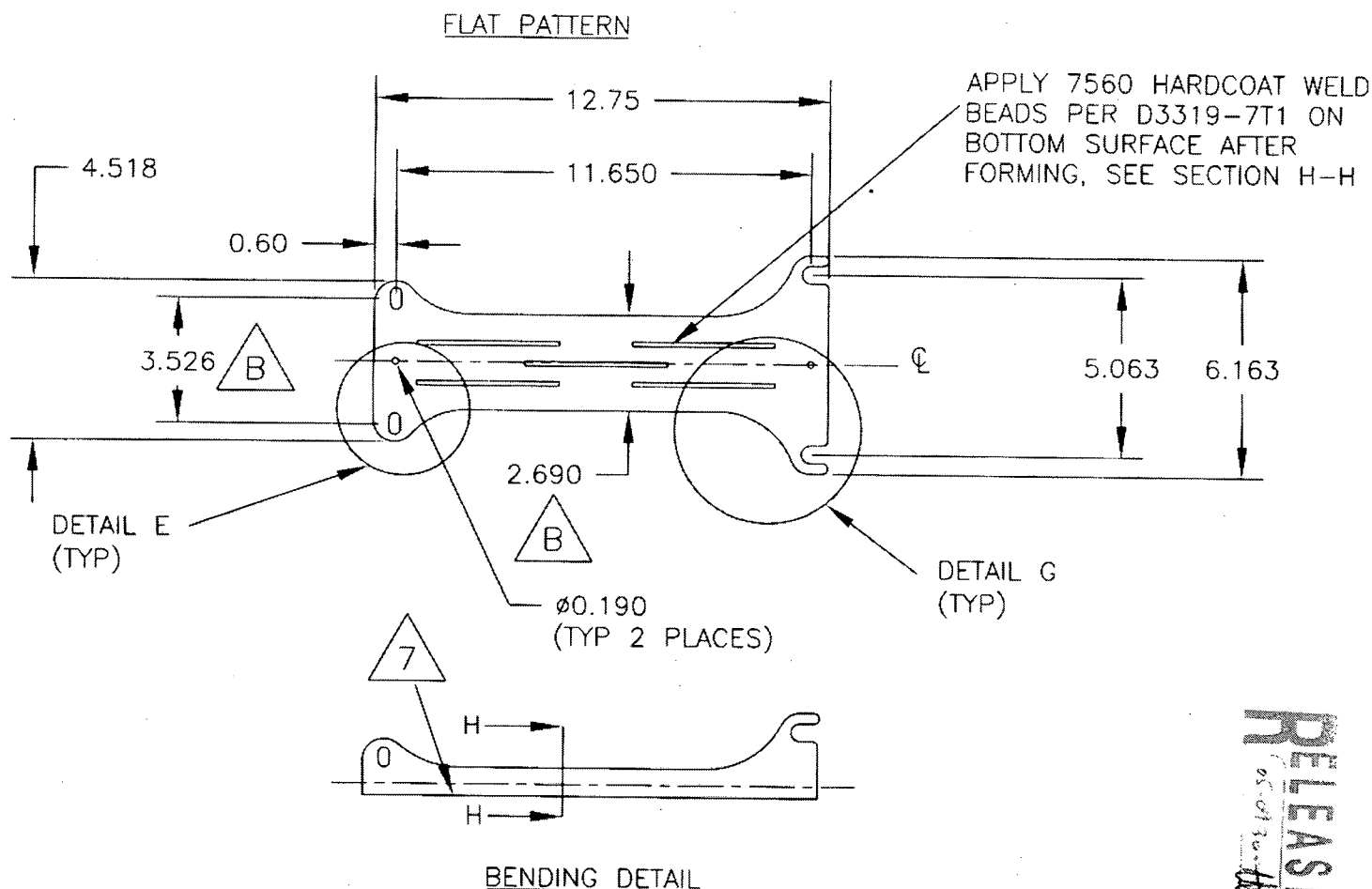
65760



DESIGN	PH	DRAWN BY	PH	DART AEROSPACE LTD
CHECKED	PH	APPROVED	PH	HAWKESBURY, ONTARIO, CANADA
DATE	05.06.06	TITLE	D3319	REV. B
			WEARPLATE	SHEET 4 OF 5
				SCALE 1:5

RELEASED
05.07.30.06

65260



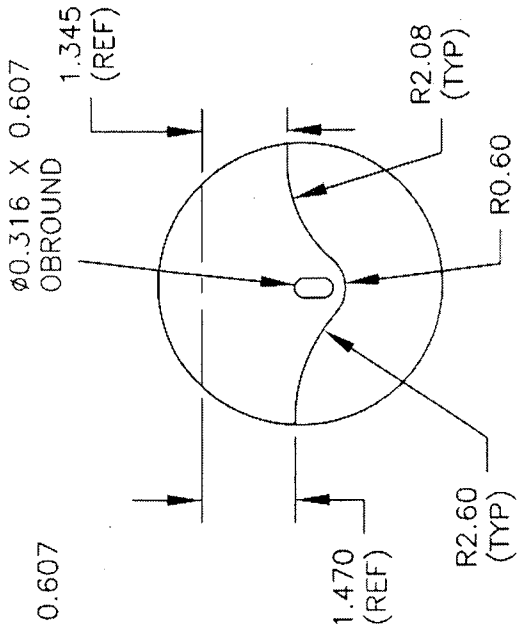
D3319-7 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER: "TCCA-PDA, DART AEROSPACE LTD., P/N D3319-7 B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-18"

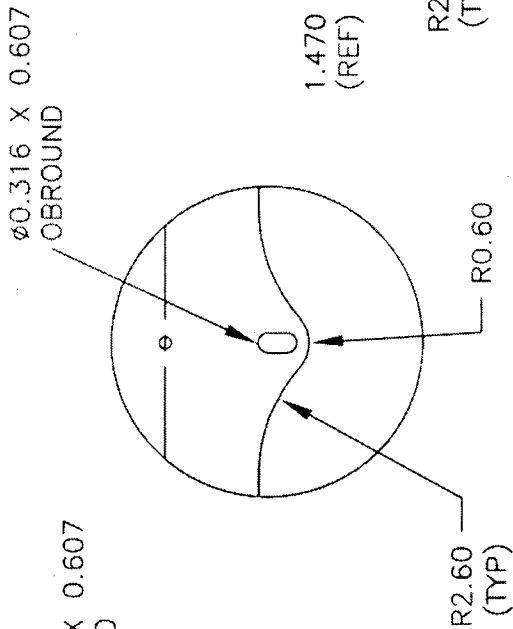


DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3319	REV: B SHEET 5 OF 5
DATE 05.06.06	TITLE WEARPLATE		SCALE 1:3

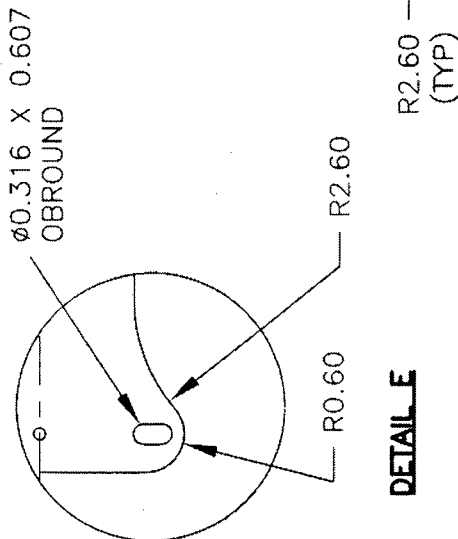
RELEASED
05-09-30



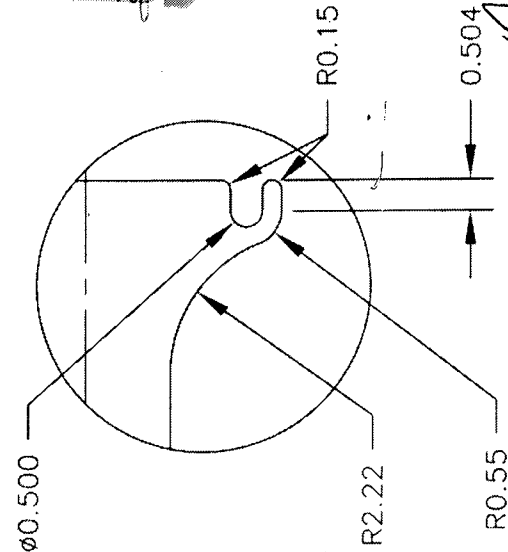
DETAIL J



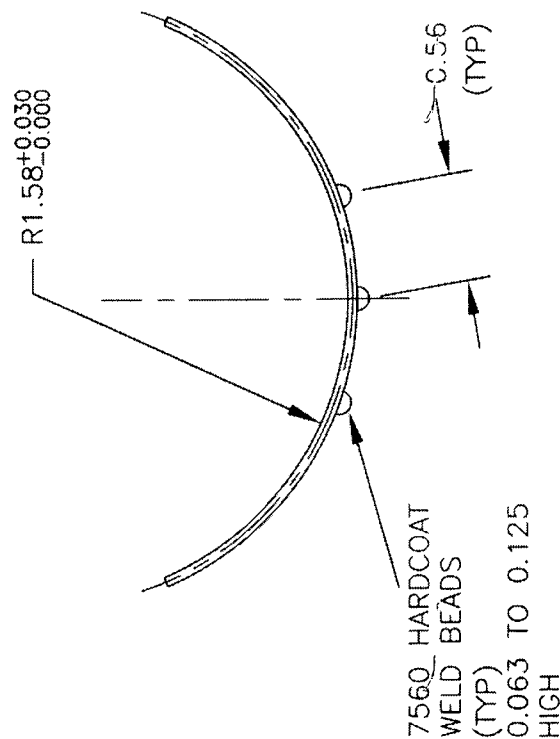
DETAIL F



DETAIL E



DETAIL G



**SECTION H-H
(SCALE 1:1)**

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